

1RF - 450

Quail Ranch Air Gap
Above-Ground Storage Tank
Recycling Containment
Permit Approval With
Conditions

Solaris Midstream LLC
May 1, 2020

From: [LucasKamat, Susan, EMNRD](#)
To: ["Todd Carpenter"](#)
Cc: ["Michael Incerto"](#); r@rthicksconsult.com; madison@rthicksconsult.com; [Griswold, Jim, EMNRD](#); [Bratcher, Mike, EMNRD](#)
Subject: RE: (Draft) Approval with Conditions, Solaris Midstream, Quail Ranch Air Gap AST Recycling Containment (1RF-450), Section 26. T26S, R34E / Lea County, NM
Date: Friday, May 1, 2020 4:04:00 PM

Dear Mr. Carpenter:

The New Mexico Oil Conservation Division (OCD) has reviewed the recycling containment permit application and related documents, submitted on behalf of Solaris Midstream LLC (Solaris) on April 29 and 30, 2020, for the proposed Quail Ranch Air Gap Above-Ground Storage Tank (AST) Recycling Containment in Lea County New Mexico.

Solaris requested variances from 19.15.34 NMAC for the Quail Ranch Air Gap AST Recycling Containment related to 19.15.34.12.A (2) NMAC containment side-slope requirements; 19.15.34.12.A (3) NMAC liner anchors and anchor trench requirements, 19.15.34.12 A (4) NMAC liner requirements, and 19.15.34.13 B (2) NMAC freeboard requirements. The following variances have been approved.

- The variance to 19.15.34.12.A (2) NMAC for the no side-slope requirement for a segmented steel tank with vertical walls for is approved.
- The variance to 19.15.34.12.A (3) NMAC for the liners to be anchored to the top of the steel walls with clips and no anchor trenches is approved.
- The variance to 19.15.34.12 A (4) NMAC for the installation of a 30-mil LLDPE non-reinforced primary liner and a 30-mil non-reinforced LLDPE secondary liner with a 200-mil geogrid drainage layer is approved for one (1) year of operation from date of permit approval.

The following variance has been denied.

- The variance to 19.15.34.13 B (2) NMAC for a 2-feet freeboard has been denied. The containment must operate with the 3-feet freeboard as specified by rule.

The Form C-147 form and supporting documents submitted for registering and permitting the Quail Ranch Air Gap AST Recycling Containment is approved with conditions of approval:

- Solaris will continue to construct, operate, maintain, close, and reclaim the Quail Ranch Air Gap AST Recycling Containment 1RF-450 in compliance with 19.15.34 NMAC, including, but not limited to, the performance of weekly inspections regardless of fluid levels in the containment; recording of detailed inspection reports; removal of debris, foreign objects and oil from the containment; and monthly reporting of recycling and reuse of produced water, drilling fluids, and liquid oil field waste via from C-148. (C-148s are available for download at the OCD website at <http://www.emnrd.state.nm.us/OCD/forms.html>.)
- The Quail Ranch Air Gap AST Recycling Containment is approved for one (1) year of operation from the date of permit approval on May 1, 2020. The Quail Ranch Air Gap

AST Recycling Containment permit expires on May 1, 2021. If Solaris wishes to extend operations past one (1) year, the recycling containment the primary and secondary liners must be replaced and brought into compliance with 19.15.34.12 A (4) NMAC. A permit renewal must be submitted using a form C-147 via email to OCD.Enviro@state.nm.us by April 1, 2021.

- Solaris will notify OCD when operations commence and cease at the Quail Ranch Air Gap AST.
- Solaris cannot receive produced water in the Quail Ranch Air Gap AST until after the original copy of the financial assurance has been accepted by OCD. The financial assurance bond should be mailed to the Oil Conservation Division; ATTN: Eva Mathes, Bonding and Compliance; 1220 South St Frances Drive; Santa Fe, NM 87505. OCD will notify you when the bond has been received and approved.
- A minimum of 3-feet freeboard must be maintained in the recycling containment at all times during operations.
- Solaris will provide OCD with the calculations for the operational total fluid capacity of the containment within 30 days of receiving produced water in the containment. The operational fluid capacity is the total volume of the containment, minus the volume not utilized due to the freeboard.
- If less than 20% of the total fluid capacity is utilized every six months, beginning from the first withdraw, operation of the facility is considered ceased and notification of cessation of operations should be sent electronically to OCD.Enviro@state.nm.us. An extension to extend the cessation of operation, not to exceed six months, may be submitted using a C-147 form to OCD.Enviro@state.nm.us. No extensions for cessation of operations for Quail Ranch Air Gap AST will be considered unless the primary and secondary liners have been replaced with liners compliant with 19.15.34.12 A (4) NMAC.
- Solaris will comply with 19.15.29 NMAC Releases in the event of any release of produced water or produced water or other oil field wastes at Quail Ranch Air Gap AST. Solaris will comply with all other OCD rules.
- Solaris must perform weekly inspections of the containment and leak detection system, regardless of fluid levels in the containment. The weekly inspections should be submitted electronically on a monthly basis, along with the monthly C-148 report, to OCD.Enviro@state.nm.us.

The facility has been assigned OCD Administrative Order number 1RF-450. Please reference this permit number in all future communications, modifications, and notices related to Quail Ranch Air Gap AST Recycling Containment and for monthly reporting of recycling and reuse of produced water, drilling fluids and liquid oil field waste. A copy of the approved C-147 with conditions for 1RF-450 will be uploaded to the OCD Imaging system at <http://ocdimage.emnrd.state.nm.us/imaging//AEOrderFileView.aspx?appNo=pSL2011849240> within 24 hours.

Notifications of the start and cessation of operations should be emailed to the OCD Environmental Bureau (OCD.Enviro@state.nm.us) with a cc to OCD District Manager Mike Bratcher (mike.bratcher@state.nm.us).

Please keep a copy of this electronic communication for your files, as no paper copy of the approval will be delivered. A copy of this electronic communication will be saved in 1RF-450 electronic file on OCD Imaging referenced above.

Thank you for your assistance and cooperation on this matter.

Please do not hesitate to contact me if you have further questions or concerns.

Regards,

Susan A. Lucas Kamat

Environmental Scientist

Oil Conservation Division

Energy, Minerals, and Natural Resources Department

5200 Oakland Avenue, Suite 100

Albuquerque, New Mexico 87113

(505) 670-8745

Susan.LucasKamat@state.nm.us

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-147
Revised April 3, 2017

Recycling Facility and/or Recycling Containment

Type of Facility: ☐ Recycling Facility ☒ Recycling Containment*
Type of action: ☐ Permit ☒ Registration
☐ Modification ☐ Extension
☐ Closure ☐ Other (explain) _____

*** At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.**

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Solaris Midstream LLC OGRID #: 371643
Address: 9811 Katy Freeway, Suite 900, Houston, TX, 77024
Facility or well name (include API# if associated with a well): Quail Ranch Air Gap Above-Ground Storage Tank
OCD Permit Number: 1RF-450 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr: A Section: 26 Township: 24S Range: 34E County: Lea
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Recycling Facility:**
Location of (if applicable): Latitude _____ Longitude: _____ (NAD83) _____ (Various)
Proposed Use: ☒ Drilling* ☒ Completion* ☒ Production* ☒ Plugging *
**The re-use of produced water may NOT be used until fresh water zones are cased and cemented*
☐ Other, *requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.*
☒ Fluid Storage
☐ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type _____
☐ Activity permitted under 19.15.36 NMAC explain type: _____ ☐ Other explain _____
☐ For multiple or additional recycling containments, attach design and location information of each containment
☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: _____

3.
☒ **Recycling Containment:**
☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)
Center of Recycling Containment (if applicable) Pond- Lat 32.1828308°N Long 103.4416101°W (approx.)
☐ For multiple or additional recycling containments, attach design and location information of each containment
☒ Lined ☒ Liner type: Thickness 30 mil Primary, 30 mil Secondary ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: 22,000 BBL Dimensions 350' x 350'
☐ Recycling Containment Closure Completion Date: _____

4.

Bonding:

- ☐ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☒ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ _____ (work on these facilities cannot commence until bonding amounts are approved)
- ☐ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

Fencing:

- ☒ Four-foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify: _____.

6.

Signs:

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

- ☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.
- If a Variance is requested, it must be approved prior to implementation. See Volume 2 for Variances***

8.

Siting Criteria for Recycling Containment

Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

General siting

Ground water is less than 50 feet below the bottom of the Recycling Containment.

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells **FIGURES 1-2**

☐ Yes ☒ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; written approval obtained from the municipality **FIGURE 3**

☐ Yes ☒ No
☐ NA

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division **FIGURE 4**

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map **FIGURE 5**

☐ Yes ☒ No

Within a 100-year floodplain. FEMA map **FIGURE 6**

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; visual inspection (certification) of the proposed site **FIGURE 7**

☐ Yes ☒ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; aerial photo; satellite image **FIGURE 8**

☐ Yes ☒ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. **FIGURES 1 and 7**

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 500 feet of a wetland. **FIGURE 9**

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

☐ Yes ☒ No

9.

Recycling Facility and/or Containment Checklist:

Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☒ Design Plan - based upon the appropriate requirements.
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements.
- ☒ Closure Plan - based upon the appropriate requirements.
- ☒ Site Specific Groundwater Data -
- ☒ Siting Criteria Compliance Demonstrations -
- ☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

Operator Application Certification:

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Bradley Todd Carpenter Title: Operations Manager

Signature: Bradley Todd Carpenter Date: April 24 2020

e-mail address Todd Carpenter <todd.carpenter@solarismidstream.com> Telephone: 432 203 9020

11.

OCD Representative Signature: Susan G. Linn Rand Approval Date: May 1, 2020

Title: Environmental Scientist OCD Permit Number: 1RF-450

- ☐ OCD Conditions
- ☒ Additional OCD Conditions on Attachment Please refer to attached email approval email for conditions upon approval and variance determinations.

C-147 received April 24, 2020. Revised C-147 received April 29, 2020, with replacement cost closure estimate received April 30, 2020.

C-147 approved with conditions May 1, 2020.

OCD Order #1RF-450. Request # pSL1933029983. Facility # fSL2012541849.